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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/343,684	06/30/99	BORYSOWICZ	A 1029/182

IM22/0329
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EXAMINER

VINCENT, S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED:

03/29/01

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/343,684

Applicant(s)

BORYSOWICZ ET AL.

Examiner

Sean E Vincent

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.

- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
4. Regarding claim 1, the term "and/or " renders the claim indefinite because it is unclear whether the limitation(s) following the "and/or" are part of the claimed invention.
5. Regarding claim 2, the phrase "i.e." renders the claim indefinite because it is unclear whether the limitation(s) following the "i.e." are part of the claimed invention.
6. Claim 2 recites the limitation "the learning phase" in line 2. There is insufficient antecedent basis for this limitation in the claim.
7. Regarding claim 4, the term "possibly " in line 3 renders the claim indefinite because it is unclear whether the limitation(s) following the "possibly" are part of the claimed invention.
8. Claim 5 recites the limitation "the glass batch" in line 3 and also the limitation "the batch piles" in line 4. There is insufficient antecedent basis for these limitations in the claim.
9. Claim 6 recites the limitation "the flames" in line 3 and also "the burners" in lines 3 and 4. There is insufficient antecedent basis for these limitations in the claim.

Art Unit: 1731

10. Claim 7 recites the limitation "the convection currents" in line 3. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 8 recites the limitation "the bubblers" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (US 5272621). The features of applicant's claims can be found in the figures, col. 4, line 22 to col. 7, line 55, col. 12, line 3 to col. 13, line 41. It is the position of the examiner that the claimed 'learning device' reads on the means for evaluating operator input disclosed by Aoki.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 1731

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Victor et al (IEEE article).

17. Aoki does not teach the inclusion of a video camera or image processing means. Victor et al teaches a computer vision system for acquiring and processing images of flames, combustion chamber walls and nonfused materials in the melting tank of a glass furnace (see entire article). Victor et al also teaches Bayesian and neural network classification means, means for controlling furnace bubblers, and learning means as well as using flame classification data in a feedback controller to operate the furnace. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the image acquisition and processing system, the classification and learning means and the flame and bubbler control means of Victor et al into the apparatus of Aoki because Victor et al teaches that it would result in a fast control system implementation.

18. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Miller (US 4409012).

19. Aoki does not teach the inclusion of a video camera or image processing means. Miller teaches a glass furnace in which a video camera is positioned to view the surface of the batch and melt mixture wherein the video signal is digitized and processed for monitoring the operation of

Art Unit: 1731

the furnace bubblers (see figures; abstract; col. 1, lines 39-50; col. 2, lines 30-39 and lines 60-65; col. 3, lines 51-68; col. 4, lines 1-46; col. 5, lines 1-12; col. 7, lines 24-65). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the batch monitoring system of Miller within the apparatus of Aoki because Miller teaches that it was a more efficient monitoring means.

Conclusion

20. The prior art made of record and not relied upon is cited to further show the state of the art.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E Vincent whose telephone number is 703-305-3607. The examiner can normally be reached on M - F (8:30 - 6:00) Second Monday Off.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

23. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Sean E Vincent
Primary Examiner
Art Unit 1731

S Vincent
March 23, 2001